

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GUIDO CAPPELLOTTO

Appeal No. 1999-1534
Application No. 08/799,210¹

ON BRIEF

Before CALVERT, Administrative Patent Judge, McCANDLISH, Senior Administrative Patent Judge, and NASE, Administrative Patent Judge.

NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 to 4, 7 and 8. Claim 9 has been

¹ Application for patent filed February 13, 1997.

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objected to as depending from a non-allowed claim and claims 5
and 6 have been canceled.

We AFFIRM.

BACKGROUND

The appellant's invention relates to a spoke nipple and a method of manufacturing a spoke nipple. An understanding of the invention can be derived from a reading of exemplary claim 1 which is reproduced in the opinion section below.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Sauer 1948	2,450,694	Oct. 5,
Horling, Jr. 1957	2,778,690	Jan. 22,
Hillis et al. 1997 (Hillis)	5,673,976	Oct. 7, (filed Feb. 15, 1995)

Claims 1 to 4, 7 and 8 stand rejected under 35 U.S.C. § 103 as being unpatentable over Hillis in view of Horling and Sauer.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejection, we make reference to the final rejection (Paper No.

5, mailed March 6, 1998) and the examiner's answer (Paper No. 13, mailed January 19, 1999) for the examiner's complete reasoning in support of the rejection, and to the appellant's brief (Paper No. 12, filed November 5, 1998) for the appellant's arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by the appellant and the examiner. As a consequence of our review, we make the determinations which follow.

Claim 1

We sustain the rejection of claim 1 under 35 U.S.C. § 103.

Claim 1 reads as follows:

A spoke nipple comprising a body of substantially undeformable metallic material with a head and a shank which have an at least partially threaded axial hole for

housing the thread of a spoke, characterized in that it comprises a perforated insert of substantially deformable plastics material which is fixed to the body with the holes in the insert and in the body arranged coaxially, the hole in the insert having an inside diameter such as to house the thread of the spoke with interference when it is screwed into the hole in the body.

Hillis discloses a spoke nipple. As shown in Figure 3, the spoke nipple 50 is a unitary structure made of 2024-T4 aluminum, and includes spline drive 52 on an outer peripheral surface 54 of an elongated shaft 56 and an enlarged head portion 58. The elongated shaft 56 defines an inlet 60 and a through passageway 62 which extends from and includes inlet 60 to and including outlet opening 64 in enlarged head portion 58. Passageway 62 is defined by a substantially smooth interior surface 66 and a threaded surface 68. The outer peripheral surface 54, interior surface 66 and threaded surface 68 are each generally right circular cylindrical in configuration.

Horling also discloses a spoke nipple. As shown in Figures 3 and 5, the spoke nipple 14 includes an elongated tubular body 16 and a tubular insert 25. The tubular body 16

includes a longitudinally extending bore 17 and a counterbore 18 having a diameter somewhat greater than the diameter of the bore 17. Horling teaches (column 2, lines 35-62) that the insert 25 is disposed in counterbore 18 and is formed of a material, such as compressed fiber, softer than the material of the body 16. The insert 25 has a bore 26 disposed coaxially of the bore 17. The bore 26 has a diameter somewhat less than the diameter of the bore 17 and somewhat less than the diameter of the screw threaded end 30 of a spoke 15 so that the spoke can be self-threaded into the bore 26 of the insert 25.

Sauer discloses a self-locking nut. As shown in the figure, the self-locking nut includes a metal body 10 having a threaded bore 12 and a locking collar 16 having a bore 18 disposed in a recess 14 formed in the body 10. Sauer teaches (column 1, lines 20-27) that the bore 18 of collar 16 is somewhat smaller than the diameter of the thread 12 so that when the nut is screwed on a bolt, the bolt thread impresses a thread in the collar 16. Sauer also teaches (column 2, lines 45-55) to make the locking collar from nylon for the following

reasons: (1) so that the locking collar can retain its locking characteristics much better under humid conditions, (2) so that the locking collar can be reused, and (3) economy in the manufacturing of the locking collars.

The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art. See In re Young, 927 F.2d 588, 591, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991) and In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). Moreover, in evaluating such references it is proper to take into account not only the specific teachings of the references but also the inferences which one skilled in the art would reasonably be expected to draw therefrom. In re Preda, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

In applying the above-noted test for obviousness, we agree with the examiner's determinations of obviousness as set forth on pages 2-3 of the final rejection. In that regard, we conclude that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have

(1) provided a self-threading insert at the head portion of Hillis' spoke nipple as suggested by Horling's insert 25 and Sauer's collar 16 to prevent a spoke from loosening, and (2) made the self-threading insert from nylon for the reasons suggested by Sauer's nylon collar 16.

The appellant argues (brief, pp. 4-7) that there is no suggestion or teaching in either Hillis or Horling which would have led one skilled in the art "to provide a combination of a spoke nipple having threads in the metallic body and an insert into which a threaded spoke may be screwed." This argument is based upon the facts that (1) there is no teaching or suggestion in Hillis "of an insert of non-metallic material," and (2) "the axial hole [i.e., bore 17] extending through the spoke nipple [of Horling] is not provided with any threads."

The fallacy with the appellant's argument is that it does not consider the teachings of Sauer. The rejection of claim 1 is based upon the combined teachings of Hillis, Horling and Sauer and not just the teachings of Hillis and Horling as argued by the appellant. As noted previously, it is our

opinion that the combined teachings of Hillis, Horling and Sauer would have suggested to one of ordinary skill in the art at the time the invention was made a spoke nipple having threads in the metallic body and an insert into which a threaded spoke may be screwed.

For the reasons stated above, the decision of the examiner to reject claim 1 under 35 U.S.C. § 103 is affirmed.

Claims 2 to 4, 7 and 8

The appellant has grouped claims 1 to 4, 7 and 8 as standing or falling together.² Thereby, in accordance with 37 CFR

§ 1.192(c)(7), claims 2 to 4, 7 and 8 fall with claim 1. Thus, it follows that the decision of the examiner to reject claims 2 to 4, 7 and 8 under 35 U.S.C. § 103 is also affirmed.

CONCLUSION

² See page 4 of the appellant's brief.

To summarize, the decision of the examiner to reject claims 1 to 4, 7 and 8 under 35 U.S.C. § 103 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

IAN A. CALVERT)	
Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
HARRISON E. McCANDLISH)	APPEALS
Senior Administrative Patent Judge)	
) AND)	
)	INTERFERENCES
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JEFFREY V. NASE)	
Administrative Patent Judge)	

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APPLICATION NO. 08/799,210

APJ NASE

APJ CALVERT

SAPJ McCANDLISH

DECISION: **AFFIRMED**

Prepared By: Gloria Henderson

DRAFT TYPED: 02 Jul 99

FINAL TYPED: